

I CLAIM:

Sub 17 A racket comprising:

a racket frame comprising a racket handle portion orientated along a longitudinal axis of the racket, a racket head portion allowing for the attachment thereto of generally longitudinally directed strings and generally laterally directed strings to form a string bed of the racket, and a racket throat area joining the handle portion with the head portion; and

a self-powered piezoelectric damping system for dampening vibrations of the racket during play, the self-powered piezoelectric damping system comprising at least one transducer element laminated to the racket frame and at least one circuit located within the racket handle portion and electrically connected to the at least one transducer element.

2. The racket of claim 1, wherein the racket comprises two transducer elements electrically connected to the circuit.

3. The racket of claim 1, wherein the at least one transducer element is located at the racket throat area.

4. The racket of claim 3, wherein the racket comprises two transducer elements, both transducer elements located at the racket throat area and electrically connected to the circuit.

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5. The racket of claim 1, wherein the racket further includes a protective coating covering the at least one transducer element.
6. The racket of claim 1, wherein the racket handle portion includes a slot in the racket handle portion and the circuit is affixed within the slot.
7. The racket of claim 6, wherein the slot extends completely through the racket handle portion.
8. The racket of claim 6, wherein the slot is at least partially filled with a foam to fix the circuit within the slot.
9. The racket of claim 6, wherein the circuit includes a circuit board and the circuit board is affixed to the racket handle portion.
10. The racket of claim 1, wherein the circuit is affixed to an end cap of the racket and the end cap is affixed to the racket handle portion.

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